

**Gulf of Mexico Coastal Ocean Observing System
Education and Outreach Council Annual Meeting
Five Rivers Delta Resource Center, Spanish Fort, AL
18 June 2007**

The second annual meeting of the Education and Outreach Council (EOC) of the Gulf of Mexico Coastal Ocean Observing System Regional Association (GCOOS-RA) was held at the Five Rivers Delta Resource Center in Spanish Fort, AL, on 18 June 2007. The meeting was held jointly with the Gulf of Mexico Alliance (GOMA) Environmental Education Network (EEN), which held its part of the meeting on 19-20 June 2007. This document constitutes the report of the EOC; the GOMA EEN meeting report is available at <http://www2.nos.noaa.gov/gomex/>.

1.0 Opening of Meeting

1.1 Welcome, Introductions

The meeting began with a welcome by Mike Spranger, Assistant Director, Florida Sea Grant Program, and Chair of the GCOOS Education and Outreach Council. He introduced the GCOOS Board of Directors who were present at the meeting and reviewed logistics. Spranger then asked that each participant give a brief introduction to the group. The list of attendees with affiliations is provided in Appendix A.

Ann Jochens, GCOOS Regional Coordinator, was unable to attend due to weather; however, she was present via conferencing capabilities throughout the meeting. On her behalf, Mike Spranger presented all of Jochens' talks at the meeting.

1.2 Purpose of the Meeting

Mike Spranger provided an overview of the purpose of the Joint Meeting. Lee Yokel, GOMA Education Coordinator, provided a brief presentation outlining GOMA priority teams, grant proposals, current projects, and the GOMA organizational structure.

Sharon Walker, Past GCOOS EOC Chair and GCOOS Board member, formally introduced Tami Wells as the GCOOS EOC Coordinator. Walker gave an overview of Well's academic, research, business, and work experience in coastal and marine sciences. The EOC coordinator selection committee members were Walker and Spranger, John Dindo (Assistant Director for the Dauphin Island Sea Lab), and Joe Swaykos (Director of the University of Southern Mississippi, Center of Higher Learning).

1.3 Agenda Adoption

Spranger asked for any changes to the provisional agenda (Appendix B). He requested the agenda be revised to add the discussion and election of the new GCOOS EOC Chair-Elect after the break at 1500 hours. Ralph Rayburn of the Texas Sea Grant College Program made the

motion to accept the proposed GCOOS EOC meeting agenda with this adjustment; Sharon Walker seconded the motion. The revised agenda was adopted with all in favor.

2.0 GCOOS Update

Mike Spranger gave an overview of ocean observing systems to provide a common background for all EOC and visiting EEN members. The overview included information on why and how the oceans are observed and what the basic components of an observing system would be. The international, national, and regional aspects of the efforts to develop the ocean observing system also were presented.

Spranger then provided copies of the Meeting Minutes from the GCOOS EOC Annual Meeting held in Ocean Springs, MS on 24-25 April 2006. He reviewed the programmatic questions for the GCOOS EOC work, and gave an overview of the GCOOS EOC Work Plan for May 2006 through April 2007. Spranger summarized the Duties and Roles of the EOC. The current GCOOS EOC Work (Action) Plan may be found on the GCOOS web page.

2.1 GCOOS Board Semi-Annual Meeting

Mike Spranger presented the GCOOS update on behalf of Ann Jochens. The GCOOS Board of Directors met twice, in August 2006 and March 2007, since the last EOC meeting. The focus of the Board meetings were on the development of stakeholder priorities, the selection of pilot projects and teams to move them forward, and the identification of funding sources. Detailed meeting reports are available at <http://www.gcoos.org/>.

2.2 GCOOS Workshops and Pilot Projects in 2006-2007

Spranger continued the GCOOS update with a discussion of the workshops held in 2006 and 2007, the plans for future workshops, and the activities associated with the priority pilot projects. There is a substantial effort to identify the measurements and products with highest priority for specific stakeholder sectors. The most recent stakeholder workshop was the GCOOS/SECOORA Storm Surge and Inundation Workshop held 24-26 January 2007 in New Orleans, LA. The meeting report is posted on the GCOOS web. Focused workshops are planned for the maritime transportation, recreational boating, and urban planners/developers sectors. The fisheries sectors are being engaged through regulatory bodies. A standing Task Team on Public Health has been established to address priority issues associated with water quality issues such as beach water quality and harmful algal blooms.

The status of the eight pilot projects being developed was reviewed. The pilots are in various stages of planning, with funding sources to be identified. As each pilot project working team develops a prospectus, the team and the Board consider how to obtain funding for the project. Federal, state, and private sources and combinations thereof are being considered.

2.3 Grant Proposals in Process

Spranger and Walker reviewed the GCOOS project proposals that have been submitted to federal agencies. Walker explained that the GCOOS-RA is committed to applying 10% of proposal budgets to education and outreach objectives associated with the projects. Of three proposals submitted to the National Oceanic and Atmospheric Administration (NOAA) Coastal Services Center (CSC) for FY07, two were selected for funding. The “Standardization of Local Data Network Nodes in the GCOOS-RA” was funded for three years at \$898,304 with approximately \$90K going to the E/O activities. It had two E/O components, each at about half the E/O total: training to nodes personnel and training to those who will interface with stakeholders and the public. “In-reach” within the EOC is planned with a select group of four to six members, with at least one representative from each Gulf of Mexico state. The “Integration of and Regional Enhancements to the Gulf of Mexico Coastal Ocean Observing System” project was funded at \$500K for one year; this was a reduction of a broader proposal that included a surface currents measurement program and a data portal. A revised proposal was due at NOAA by June 22. The revised proposal is planned to be limited to the development of the GCOOS Data Portal. About \$50K of the project is planned to integrate GCOOS E/O activities and requirements into the design of the Data Portal.

3.0 IOOS Update

Mike Spranger gave an update on the U.S. Integrated Ocean Observing System (IOOS). He identified how observation data can be effectively communicated to end-users through a global information system (GIS) internet management system (IMS). He recognized how practical applications of COOS data can help mitigate natural hazards, ensure safe and efficient marine operations, manage living marine resources, and address public opinion about ecosystem and public health regarding coastal waters. Additionally, Spranger re-iterated “why” education and outreach are important components to GCOOS. He discussed some of the key issues that connect users with science.

4.0 International Collaboration

4.1 Mexico Interactions

Mike Spranger outlined the recent GCOOS interactions with Mexico. On 26-30 June 2006, GCOOS Board members Worth Nowlin, Alfredo Prelat, Raymond Toll, and Jan van Smirren met with a number of Mexican colleagues to provide information on GCOOS and to invite their organizations to become Associate Parties to the GCOOS Memorandum of Agreement. All parties expressed interest in GCOOS. The Board members also urged the Mexican organizations to participate in public sharing of real-time data sets to expand the data available on the Gulf of Mexico coastal ocean. As part of the activities, the Board members gave a presentation on GCOOS at the Second Workshop/Symposium on Coastal Ecosystems of the Gulf of Mexico and Caribbean Sea at the University of Tabasco.

4.2 Caribbean Regional Association

José López, University of Puerto Rico, Department of Marine Sciences, provided a status report on the Caribbean Regional Association (CaRA). CaRA consists of the commonwealth of Puerto

Rico, United States Virgin Islands, and Navassa. The ocean observing system that is being developed by CaRA is called the Caribbean Regional Integrated Coastal Ocean Observing System (CaRICOOS). López briefly described the environmental, data and forecast needs of the regional user groups, including emergency managers, environmental and infrastructure managers, maritime transportation, and tourist/marine operators, and reported on the activities of CaRA to identify the stakeholder needs. Additionally, he discussed the progress of CaRA toward IOOS certification, which all regional associations must obtain. López stated that an important step in progress toward certification was the hiring of Dr. Jorge Capella as DMAC Coordinator. López concluded by stating that CaRA will continue building stakeholders, identifying needed observations, enhancing data flow and communication between users and providers, and developing pilot projects to demonstrate the usefulness and need for new components for the CaRICOOS. Additional information on CaRA can be found at <http://cara.uprm.edu/>.

5.0 Education and Outreach Council Activities

As a prelude to discussions of EOC activities, Mike Spranger reviewed for the GCOOS EOC the operational questions presented at the E/O formation meeting in November 2004. These questions were whether the membership should be inclusive or exclusive; how GCOOS should integrate other agencies and educational partners; what is the decision-making process in GCOOS EOC; what are the funding priorities; how should GCOOS funds be allocated; and what are the responsibilities of the GCOOS EOC in its terms of reference. Jessica Kastler, GCOOS Chair Elect, then reviewed the programmatic questions for the group. These issues were to identify Marine/Coastal stakeholders; find ways to prioritize these groups; identify existing user networks; provide ideas on forms and formats of new GCOOS products; discuss how we should disseminate GCOOS products; and measure the effectiveness of E/O effectiveness with user groups.

5.1 Hiring of EOC Coordinator

Sharon Walker suggested that, as we have previously discussed the hiring of the EOC Coordinator, we move to next item. No one objected to this request.

5.2 Review of EOC Work Plan and Budget

Mike Spranger reviewed the GCOOS EOC 2006-2007 Work Activities. The EOC's first plan of action was to hire the GCOOS E/O Coordinator; this was accomplished. Tami Wells was hired as the GCOOS E/O Coordinator and began work on April 16, 2007. A second EOC task was that the EOC will provide questions to GOMA to be included as part of the GOMA needs assessment survey. Third, the GCOOS EOC should begin to develop a strategic plan now that the GCOOS E/O Coordinator is hired. Spranger mentioned that the GCOOS exhibits/materials and regional trainings will be supported by the present and future NOAA CSC grants. EOC action plan item 8 is to provide E/O materials for inclusion on the GCOOS web site; it was agreed that an EOC page needed to be developed to improve coverage of the E/O component of GCOOS.

6.0 Overview of GOMA Environmental Education Network

As part of the Gulf of Mexico Alliance (GOMA), an Environmental Education Network (EEN) was established. The EEN board consists of the GOMA representatives of the five Gulf coast states for the education priority issue team. In 2006, a GOMA EEN Coordinator was funded and resides at the MS-AL Sea Grant office; Lee Yokel was hired for the position. Sharon Walker, John Dindo, and Lee Yokel developed a plan for a Four-Phase Public Awareness Campaign. Dindo and Yokel submitted the proposal to the Environmental Protection Agency-Gulf of Mexico Program (EPA-GOMP). Funding has been approved for Phase I. Additional proposals for Phases II and III were submitted, and funding has been verbally approved for Phase II and part of Phase III from NOAA's Northern Gulf Institute.

7.0 Review of EOC Subcommittees

Becoming Past-Chair, Mike Spranger turned over the Chair of the EOC to Jessica Kastler.

Spranger and Kastler reviewed the GCOOS EOC subcommittee structure. There are four subcommittees: Strategic Planning Subcommittee, Public Relations Subcommittee, Resources and Funding Subcommittee, and Education Advisory Subcommittee. With the E/O Coordinator now on board, the critical step is for the Strategic Planning Subcommittee to meet and develop the EOC strategic plan. To take advantage of the presence of GOMA EEN members, it was decided that the group would break out into four groups, excluding the Strategic Planning Subcommittee but adding an Outreach working group, to consider actions needed to improve the GCOOS E/O effort and the associated priorities. The working groups were broken out as follows:

Table 1. Participants in the four EOC Subcommittees:

Name	Affiliation
<i>Public Relations Subcommittee</i>	
Pamela Terasaki	
Kara Lankford	Mobile National Estuary Program
Jean May-Brett	LA Dept of Education
Debbi Berger	Florida Aquarium
Stacy Graison	Florida Aquarium
Lei Hu	Dauphin Island Sea Lab
Lee Yokel	Gulf of Mexico Alliance
<i>Outreach Subcommittee</i>	
Dianne Lindstedt	LA Sea Grant
Steve Sempier	MS-AL Sea Grant Consortium
Ali Hudon	USF
Ann Jochens (internet)	TAMU
Carol Lutken	Center for Marine Resources and Environmental Technology, University of Mississippi
Jennifer Buchanan	Grand Bay NERR

Rob Smith	Fugro GEOS Inc.
<i>Education Advisory Subcommittee</i>	
Kris Shipman	Texas Parks and Wildlife Coastal Fisheries
Lloyd Scott	Mobile Environmental Studies Center
Russanne Low	Globe Program, University Corporation for Atmospheric Research
Chris Verlinde	UF/IFAS Santa Rosa County Sea Grant Extension
Pam Blanchard	LSU Educational Theory, Policy and Practice
Becky Boudreaux	NOAA GCSC
Alison Hammer	NOAA
Linda Broussard	DOI/USGS National Wetlands Research Center, Library
Jay Gamble	US ACOE
Debbie Berger	Florida Aquarium
Stacy Graison	Florida Aquarium
Dianne Lindstedt	LA Sea Grant
Karla Klay	Artist Boat - Galveston
<i>Resource Subcommittee</i>	
Joe Swaykos	USM Center of Higher Learning
Fred Zeile	NOAA
Mike Spranger	UF/Florida Sea Grant
Sharon H. Walker	USM/J.L. Scott Marine Education Center/MS-AL Sea Grant Consortium/NOAA
Marco J Gierdino	NASA
Jose M Lopez	University of Puerto Rico
Ralph Rayburn	Texas Sea Grant College Program
Rick Wallace	Auburn University
Tabitha Stadler	Rookery Bay NERR

8.0 GOMA EEN – GCOOS EOC Potential Collaborations

Kastler spoke of the areas of mutual interest between GOMA and GCOOS. She identified several areas of similar interest, such as the improvement of Harmful Algal Bloom (HABs) detection, water quality impacts on human health, gap analysis of observational capacity, coastal resiliency and coastal storm surge and inundation predictions, and education and outreach. These areas also included the usefulness of the GCOOS website and the GCOOS data portal to conveying information to E/O users. The GCOOS technical data will be important elements relevant for GOMA priorities. Likewise, GOMA resources, such as those provided through the EPA Gulf of Mexico Program to Rookery Bay National Estuarine Research Reserve and Barataria-Terrebonne National Estuary Program on website and diversity issues will make important contributions to the data sets available for the GCOOS. Kastler noted that “we can find common interests between GOMA EEN and GCOOS where we can leverage expertise,

resources and funds that lead to synergy, effectiveness and efficiency within the Gulf of Mexico region in our education and outreach projects and activities.”

Karla Klay, Executive Director of Artist Boat in Galveston, TX, recommended collaboration with Dr. Bernd Würsig, Marine Mammal Research, TAMU-Galveston. Klay stated that, while working with Dr. Würsig, Dr. Joel Ortega (now at Oregon State University) surveyed the entire northern Gulf of Mexico for cetaceans with support from the U.S. Minerals Management Service (the federal agency responsible for offshore oil and gas leasing in federal waters). Ann Jochens identified another source of significant contribution and collaboration: the oil and gas industry operating in the Gulf of Mexico. A major contribution by this group is real-time data for currents from the northern Gulf that are being made available to the public through the NOAA National Data Buoy Center. That industry also is considering providing resources for a pilot study to model the 3-dimensional currents in the U.S. Gulf waters.

9.0 Nomination and Election of Chair-Elect and Other Business

Margaret Sedlecky, educational coordinator for the Weeks Bay NERR, was nominated for Chair-Elect by Sharon Walker; her nomination was seconded by Jean May-Brett. She was voted Chair-Elect unanimously by the EOC members.

Walker presented information on the plans for the GCOOS-RA Data Portal and requested the endorsement of the EOC of those plans. The EOC endorsed the plans, and Jochens was tasked to carry that information to the GCOOS Board.

10.0 2006-2008 EOC Work Plan

The EOC Work Plan for 2007-2008 directly builds on the 2006-2007 work plan. The responsibilities of the E/O Coordinator are tied, with priorities and timelines, to specific actions in the EOC Work Plan (Appendix C).

10.1 Identified work items and timeline

The GCOOS/GOMA meeting participants assembled into the four focus working groups (education, outreach, funding resources, or public relations; see Table 1 above). The groups were given 30 minutes to identify potential projects and timelines. They then meet in plenary to present results. These results are summarized below.

10.1a Potential projects discussed by the Education Subcommittee included:

- Annotate inventory of data, tools, curricular, materials (i.e. COSEE, DLESE);
- Develop a gap analysis and wish list (non-Gulf) of GCOOS;
- “Train the Trainer” Workshops (explaining data types and applications);
- Identify the interface of where GCOOS education fits with national and state standards, as well as developmentally appropriate materials; and
- Investigate and review Data Tool Book (NOAA/NASA–GEP teach module – “Train the Trainer” online module (per Rusty Low and Carline Booker)

10.1b The Outreach Subcommittee suggested that GCOOS EOC identify broad user groups such as:

- Marine Recreation/Tourism,
- Recreation Fishing,
- Commercial Fishing,
- Marine Research,
- Navigation,
- Emergency Response, and
- Oil and Gas Industry.

It should be noted the definition of the needed outreach may be different for each GCOOS user group. The GCOOS definition in the 2006 EOC meeting report stated that “It was agreed that education has the meaning of formal education, such as K-12, and that outreach includes non-formal (such as extension services), informal (such as museums and aquariums), and public information.” The GCOOS data presently are primarily meteorology and physical oceanography. The group realizes a major obstacle is that there is no single entity to advise users of data and provide these data in a useable format. However, a solution could encompass:

- Distributing the information to the user groups,
- Explaining environmental and oceanographic phenomenon to the user groups, and
- Defining the significant information needs of each user group.

Recognizing the plan needs to be achievable and relevant, the Outreach Subcommittee developed the following plan of action:

- Develop an Education/Outreach Strategic Plan;
- Identify and define the GCOOS E/O priorities ;
- Implement the most achievable and highest E/O priorities;
- Continue to develop ideas for other areas; and
- Identify three levels of awareness: novice, average knowledge, and expert.

10.1c The Public Relations Subcommittee suggestions were as follows:

1. GCOOS E/O should include small community news contacts in each state and provide addresses for GCOOS point of contacts for the following groups:

- Aquariums,
- Newsletters Editors,
- Other Networks,
- “Industry” Groups, and
- Professional Societies.

2. GCOOS E/O should send information to the website with the following information:

- Content updates,
- Appropriate references and links,
- Questions asking ...What do users want? (i.e., surveys, actions)

- Site revisions and comments, and
- Combine the GCOOS and GOMA website as a “one stop shop.”

3. GCOOS should better communicate *State and National Science Educational Standards*.

4. GCOOS should communicate 365 messages in the form of:

- A “Gulf Mini Page” (including a kids contribution to favorite facts about the Gulf of Mexico),
- Contributions from partners, and
- Dissemination of resources.

10.1d The Resource Subcommittee discussed several areas of collaborative funding, primarily focusing on Requests For Proposals (RFPs) to which the GCOOS-RA responds since the Board approved 10% of all funded proposals being spent on E/O (personnel time, projects, and/or resources). It is the hope of Sharon Walker with USM that once the E/O Coordinator’s salary is in place through 2010, the additional fiscal support provided through GCOOS’s research/operations grants, the major portion of the E/O 10% can be used for collaborative grants among E/O facilities for workshops, exhibits, resources, and needs assessments/evaluation plans. These fiscal resources will be used to implement the E/O Coordinator’s Work Plan which complements the EOC’s priorities. The E/O Coordinator (Wells), the EOC Chair (Kastler), the Past-Chairs (Spranger and Walker), and the Chair-Elect (Sedlecky), the GCOOS PI (Jochens), and EOC volunteers (Rusty Low, Diane Lindstedt, and Gary Litton) will develop a “Draft” E/O Strategic Plan which will then be sent to the entire EOC for comments, additions, and/or revisions.

10.2 Discussion of Work Plan Activities for 2007-2008

The GCOOS EOC Work Plan should be implemented within the timeframes delineated by the E/O Coordinator and the EOC (see Appendix C).

10.3 Assignments for EOC and its Subcommittees

Mike Spranger and Jessica Kastler asked the EOC Subcommittees to review the GCOOS website which will link meeting notes and committee objectives and goals for 2007-2008. Comments should be sent to Tami Wells (tami.wells@nsm.edu) and Jessica Kastler (jessiekastler@gmail.com).

The E/O Strategic Planning Committee will meet in the fall of 2007.

The GCOOS EOC meeting was adjourned at 5:15 pm.

11.0 Reception with GOMA EEN Blue Gill Restaurant

The EOC extends its appreciation to Fugro GEOS and Rob Smith for sponsoring the GCOOS reception. The reception provided the opportunity for GCOOS EOC and GOMA

EEN members to establish new connections, network, and exchange ideas in a relaxed setting.

**Appendix A: Attendees to the GCOOS Education and Outreach Meeting, Spanish
Fort, AL, 18 June 2007**

Attendee	GCOOS Role	Affiliation		State
Ali Hudon	EOC	University of South Florida College of Marine Science	Education	Florida
Alison Hammer		NOAA	Federal Agency	Maryland
Amy King		ADCNR State Lands, Coastal Section	State Agency	Alabama
Ann Crawford		Wolf Bay Watershed Watch	Non-Profit/Education	Alabama
Ann Jochens	Project Manager	GCOOS Regional Coordinator, Department of Oceanography, TAMU	State University	Texas
Ann Weaver		NOAA Coastal Services Center	Federal Agency	Maryland
Becky Boudreaux		NOAA Gulf Coast Services Center	Federal Agency	Mississippi
Bryan Fluech		Florida Sea Grant	State Agency	Florida
Carl Ferraro		ADCNR-SLD- Coastal Section	State Agency	Alabama
Carol Lutken		Center for Marine Resources and Environmental Technology, University of Mississippi	Education	Mississippi
Cassie Thibodeaux		IAP World Services at the USGS National Wetlands Research Center	Education	Louisiana
Charlene Lee		Smart Coast	Non-Profit	Alabama
Cheryl McClary		UGA	Education	Georgia
Chris Verlinde	EOC	UF/IFAS Santa Rosa County Sea Grant Extension	State Agency	Florida

Christine Walters		Grand Bay NERR	Federal Agency	Mississippi
Colette Boehm		Alabama Gulf Coast Convention & Visitors Bureau	State Agency	Alabama
Denise Runnels	RA	Radiance Technologies	Industry	Alabama
Desiree Bishop		Environmental Studies Center	Education	Alabama
Dianne Lindstedt	EOC	LSU, Louisiana Sea Grant	State Agency	Louisiana
Erik Lovestrand		Apalachicola National Estuarine Research Reserve	Federal Agency	Florida
Fred Zeile		NOAA	Federal Agency	
Greg Ira		Florida Department of Environmental Protection	State Agency	Florida
Hilda Castillo		North American Association of Environmental Educators	Education	
Jay Gamble		US Army Corps of Engineers	Federal Agency	Alabama
Jean May-Brett	EOC	Louisiana Department of Education	State Agency	Louisiana
Jennifer Buchanan	EOC	MSDMR/Grand Bay National Estuarine Research Reserve	Federal Agency	Mississippi
Jennifer Colee		GCOOS-DMAC	Federal Agency	Alabama
Jessica Kastler	EOC	LUMCON	Education	Louisiana
Jody Thompson		AUMERC/AL Sea Grant Extension	State Agency	Alabama
John Dindo	EOC	Dauphin Island Sea Lab	State University Consortium	Alabama
Jose Manuel Lopez		University of Puerto Rico: Department of Marine Sciences	State University	Puerto Rico
Joseph Swaykos	EOC	The University of Southern	State Center of Higher Learning	Mississippi

		Mississippi		
June Reddix-Stennis		Scranton Nature Center & Museum	Non-Profit	Mississippi
Kara Lankford		Mobile Bay National Estuary Program	Federal Agency	Alabama
Karen Gross		Environmental Studies Center	Education	Alabama
Karla Klay		Artist Boat	Education	Texas
Kris Shipman		Texas Parks and Wildlife Coastal Fisheries	State Agency	Texas
LaDon Swann		Mississippi-Alabama Sea Grant Consortium	State Agency	Mississippi Alabama
Lee Yokel	EOC	GOMA - DISL	Education	Alabama
Lei Hu		Dauphin Island Sea Lab	Education	Alabama
Linda Broussard		DOI / U.S. Geological Survey, National Wetlands Research Center, Library	Federal Agency	Louisiana
Linda Burnette		Office of Communications and Governmental Affairs, St. Johns River Water Management District		Florida
Lloyd Scott	EOC	Environmental Studies Center	Education	Alabama
Lynn Sisk		AL Department of Conservation and Natural Resources	State Agency	Alabama
Marco Giardino		NASA	Federal Agency	Mississippi
Marian Dicas		Grand Bay NERR	Federal Agency	Mississippi
Mary Mekkers		US Army Corps of Engineers, Mobile District	Federal Agency	Alabama
Melissa Applegate		Alabama Coastal Foundation	Non-Profit	Alabama

Mike Spranger		Florida Sea Grant, University of Florida	State Agency/University	Florida
Pam Blanchard	EOC	LSU Educational Theory, Policy, and Practice	State University	Louisiana
Pamela Terasaki		GCOOS-Education & Outreach	Education	Texas
Phillip Hinesley		AL. Dept. of Conservation and Natrual Resources	State Agency	Alabama
Quenton Dokken		Gulf of Mexico Foundation	Non-Profit	Mississippi
Rafael Calderon		The Nature Conservancy - Texas	Non-Profit	Texas
Ralph Rayburn		Texas Sea Grant College Program	State Agency	Texas
Richard Gonzales		Gulf of Mexico Foundation	Non-Profit	Texas
Rob Smith	RA	Fugro GEOS Inc.	Industry	Texas
Russanne (Rusty) Low	EOC	GLOBE Program, University Corporation for Atmospheric Research	Education	Colorado
Scott Hughes		ADEM	State Agency	Alabama
Sharon Hayes		Gulf of Mexico Program, US EPA	Federal Agency	Mississippi
Sharon Hodge		Northern Gulf Institute, Mississippi State University	State University	Mississippi
Sharon Walker	EOC, BOD	University of Southern Mississippi-Scott Marine Education Center	State University	Mississippi
Stacy Graison		The Florida Aquarium	Non-Profit	Florida
Steve Sempier		Sea Grant Mississippi State University	State Agency	Mississippi

Tabitha Stadler		Rookery Bay Research Reserve	State Agency	Florida
Tami Wells	E/O Coordinator	The University of Southern Mississippi - GCOOS EOC	Education	Mississippi
Tara Schultz		Texas State Aquarium	Education	Texas
Tom Herder		Mobile Bay National Estuary Program	Non-Profit	Alabama
Valerie Blankenship		Dog River Clearwater Revival	Non-Profit	Alabama

**APPENDIX B: Provisional Agenda for the GCOOS Education and Outreach
Council Meeting, Spanish Fork, AL, 18 June 2007**

18 June 2007

- 0830 1.0 Morning Social – Coffee, Juice, Fruit**
- 0900 2.0 Welcome, Introductions, purpose of meeting, Agenda Adoption**
- Mike Spranger, Assistant Director, Florida Sea Grant Program
- 2.1 Introductions (All)**
- Mike Spranger, Assistant Director, Florida Sea Grant Program
- 2.2 Purpose of Meeting**
- Mike Spranger, Assistant Director, Florida Sea Grant Program
- Lee Yokel, Education Coordinator, Gulf of Mexico Alliance
- 2.3 Formal Introduction of EOC Coordinator**
- Sharon Walker, Professor Emeritus, University of Southern Mississippi
- Tami Wells, GCOOS Education and Outreach Coordinator
- 2.4 Agenda Adoption**
- 0915 3.0 GCOOS Update**
- Ann Jochens, GCOOS Regional Coordinator
- 3.1 GCOOS Board Semi-Annual Meeting**
- 3.2 GCOOS Workshops in 2006-2007**
- 3.3 Grant Proposals in Process**
- 3.4 Questions and discussion**
- 0945 4.0 IOOS Update**
- Ann Jochens, GCOOS Regional Coordinator
- 4.1 Questions & discussion**
- 1015 BREAK**
- 1030 5.0 International Collaborations**
- Mike Spranger, Assistant Director, Florida Sea Grant Program
- 5.1 Mexico Interactions**
- Ann Jochens, GCOOS Regional Coordinator
- 5.2 Caribbean Regional Association**
- Jose Lopez, Professor, University of Puerto Rico
- 5.3 Questions and discussion**

- 1100 6.0 Education and Outreach Council Activities**
 - Mike Spranger, Assistant Director, Florida Sea Grant Program
 - Jessica Kastler, Marine Educator, Louisiana Universities Marine Consortium
- 6.1 Hiring of EOC Coordinator**
 - Sharon Walker, Professor Emeritus, University of Southern Mississippi
- 6.2 Review of EOC Work Plan and Budget**
 - Mike Spranger, Assistant Director, Florida Sea Grant Program
- 1145 LUNCH (On Your Own)**
- 1315 7.0 Overview of GOMA Environmental Education Network**
 - Lee Yokel, Education Coordinator, Gulf of Mexico Alliance
- 7.1 Environmental Education Network Membership/Activities**
- 7.2 Opportunities for Collaboration**
- 7.3 Questions and discussion**
- 1345 8.0 Review of EOC Working Committees**
 - Mike Spranger, Assistant Director, Florida Sea Grant Program
 - Jessica Kastler, Marine Educator, Louisiana Universities Marine Consortium
- 8.1 Regional EOC Coordinator Committee**
- 8.2 Resource Committee**
- 8.3 Public Relations Committee**
- 8.4 Education Advisory Committee**
- 8.5 Strategic Planning Committee**
- 1430 9.0 GOMA EEN–GCOOS EOC Potential Collaborations**
 - Jessica Kastler, Marine Educator, Louisiana Universities Marine Consortium
- 1500 BREAK**
- 1515 10.0 2007- 2010 EOC Work Plan**
 - Jessica Kastler, Marine Educator, Louisiana Universities Marine Consortium
- 10.1 Identified work items and timeline**
- 10.2 Discussion of Work Plan Activities for 2007-2010**
- 10.3 Assignments for EOC members/Committees**
- 1700 Adjourn GCOOS EOC meeting**
- 1830 Reception with GOMA EEN at Blue Gill Restaurant**

APPENDIX C
GCOOS Education and Outreach Annual Work Plan
and
Responsibilities of the Education and Outreach Coordinator
for the Period 1 May 2007 – 30 April 2008

29 August 2007

A. Goals of the GCOOS Education and Outreach (E/O) Coordinator

- Provide staff support for the GCOOS Education and Outreach Council (EOC) and its subcommittees and facilitate completion of tasks in the annual EOC Action Plan (AP); the current Plan from April 2006 is posted to the GCOOS web site; (EOC AP06).
- Establish strong linkages between the GCOOS E/O communities and other GCOOS and regional entities, such as GCOOS committees and councils, GCOOS data and product providers, and regional groups, e.g., Gulf of Mexico Alliance.
- Increase GCOOS E/O coordination and enhance collaborations through support of GCOOS public relations activities, circulation of GCOOS information to targeted groups, and dissemination of GCOOS E/O products.

B. Specific, Prioritized Work Responsibilities of E/O Coordinator

1. Assist the EOC to finalize the purpose and structure for each of its Subcommittees (see EOC Subcommittee structure below; EOC AP06 Task 6). This responsibility will be accomplished by the fall of 2007.
2. Assist the EOC Strategic Planning Subcommittee with the development of the initial GCOOS E/O Strategic Plan for recommendation to the GCOOS Board of Directors (EOC AP06 Task 5). This responsibility will be accomplished by the spring of 2008.
3. Develop, with guidance from the EOC Public Relations Subcommittee and input from the GCOOS Regional Coordinator and interested members of the Board of Directors, generic GCOOS portable exhibits and materials for outreach use at conferences, meetings, and other forums (EOC AP06 Task 6). This task will be implemented by the spring of 2008. The materials produced from GCOOS Public Relation efforts will be continuously updated to provide consistent and accurate information.
4. Develop, with guidance from the EOC Public Relations Subcommittee, EOC Education Advisory Subcommittee, and GCOOS Regional Coordinator, the E/O component of the GCOOS website; Provide to the web mistress relevant and

updated materials for inclusion (EOC AP06 Task 8). This responsibility is on-going.

5. Assist the EOC Education Advisory Subcommittee with development of GCOOS questions for inclusion in a needs assessment survey being prepared by GOMA; work in coordination with GOMA, COSEE, and other appropriate groups and assist GOMA with compilation of results (EOC AP06 Task 2). It is anticipated this task will be implemented in the fall of 2007.
6. Create a GCOOS EOC listserv to facilitate discussion and dissemination of information among the interested E/O communities in the Gulf of Mexico region (EOC AP06 Task 4). This responsibility was completed in the summer of 2007.
7. Assist the EOC Chairs (past, present, elect) with preparations for the annual EOC meeting (EOC AP06 Task 5). This task will be completed in conjunction with the EOC Annual Meetings.
8. Prepare the draft meeting report of the annual EOC meeting, to include all presentations and the revised Action Plan; provide to the EOC Chairs (without presentation material) and the GCOOS Regional Coordinator for comments; revise and provide approved report to GCOOS web mistress for posting to the GCOOS website (EOC APO6 Task 8). This task was completed in August of 2007.
9. Develop an annotated catalog of GCOOS current and future products and users based on the results of the needs assessment survey (EOC AP06 Task 3). This responsibility will be completed within six months of receiving the analyzed results from the survey (expected completion Fall 2008).
10. Assist the EOC Public Relations Subcommittee with GCOOS public relations efforts, as guided by the GCOOS-RA Communications Plan to be approved by the Board of Directors during this work period. Examples are: suggest formats for media release, identify agency public relations contacts, and develop media lists in coastal counties throughout the Gulf States (EOC AP06 Task 4). The identification of agency public relation contacts and development of a media lists has begun and it is anticipated that these tasks will be completed by December 31, 2007. Other E/O aspects of public relations will be ongoing and supportive of the GCOOS-RA Communication Plan.
11. Participate in regional, and national conferences to present the E/O activities of GCOOS to the education/outreach and science communities; for the work period, attend the following national conferences and GCOOS meetings (EOC AP06 Task 6) (note: this responsibility is on-going):
 - a. National Marine Educators Association (NMEA) 2007 – Portland, Maine - Exhibitor

- b. Marine Technology Society (MTS) 2007 – Vancouver, Canada – Presenter
 - c. American Geophysical Union/American Society of Limnology and Oceanography (AGU/ASLO) 2007 – Orlando, Florida – Will submit abstract
 - d. GCOOS-RA EOC meeting (June 2007)
 - e. GCOOS-RA Board of Directors meeting (September 2007)
 - f. GCOOS-RA Joint Committees meetings (November 2007)
 - g. GCOOS-RA Parties/Stakeholder Council meeting (Jan-Mar 2008)
 - h. GCOOS-RA Board of Directors meeting (Jan-Mar 2007)
 - i. Attend selected local, state, and regional meetings to provide E/O programs on GCOOS-RA activities.
12. Participate in appropriate national and regional committees to help develop the E/O component of IOOS and GCOOS and to provide GCOOS involvement with regional E/O entities; for the work period such committees include (EOC AP06 Tasks 2 and 3):
- a. IOOS Education: Data and Technology Protocols (EDATP) for Education Committee and
 - b. Advisory Board for the Centers for Ocean Sciences Education Excellence: Central Gulf of Mexico (COSEE:CGOM).

The E/O coordinator's participation in national and regional committees will be on-going.

13. Prepare an annual report summarizing results from workshops, conferences, meetings, festivals, and events. The report also will identify new stakeholders and underserved audiences within the Gulf of Mexico region; define new audiences; quantify face-to-face and virtual contacts; and document new collaborations and contacts; provide this report to the GCOOS EOC Chair and GCOOS Regional Coordinator prior to the annual EOC meeting. Material can be provided approximately monthly and then compiled into the annual report (EOC AP06 Tasks 2 and 8). This responsibility is being accomplished through meeting/trip reports and these report data will be compiled into an Annual Report in the spring of 2008.

C. Specific Responsibilities Associated with Funded Projects

1) Original GCOOS E/O Proposal (Years 1 and 2)

- In consultation with the chairs of the EOC and the two EOC Board members, initiate planning for and conduct one GCOOS Education and Outreach Workshop. The Workshop goals and objectives, intended results, and participants will be finalized in consultation with a small steering team set up to develop and plan this

Workshop. (EOC AP06 Task 7). This workshop will be conducted in the spring of 2008.

- In consultation with the chairs of the EOC and the two EOC Board members, initiate planning for a second GCOOS/GOMA Education and Outreach Workshop. The Workshop goals and objectives, intended results, and participants will be finalized in consultation with a small steering team set up to develop and plan this Workshop. (EOC AP06 Task 7). This workshop will be implemented in the May 2008-April 2009 reporting period.

2) Standardization of Local Data Network Nodes in the GCOOS-RA

- Obtain any necessary professional development training in IOOS information technology, data standards and protocols, and data nodes to be more prepared to train educators in IOOS DMAC issues.
- Recommend to the EOC Chair, E/O Board members, GCOOS Regional Coordinator and Data Management Coordinator, four to six educators from or identified by the EOC to participate with the E/O Coordinator in a small E/O subgroup for IT activities.
- With the assistance of the Data Management Coordinator, train the GCOOS EOC subgroup for IT activities so they are better prepared to serve as a user interface with IT-related issues associated with the E/O aspects of the IOOS DMAC.
- Lead the EOC subgroup in identification and, as funding allows, development of IT-related products for the E/O communities; priorities should be solicited from the EOC.

3) Development of a Data Portal for the GCOOS-RA

- Attend three Data Portal meetings and selected GCOOS Committees with two EOC members to become more cognizant of missions and goals.
- Arrange, with input from the GCOOS Regional Coordinator and Data Management Coordinator, a Two-Day Workshop for “up to” twenty EOC members, the Data Portal team, and selected individuals within the GCOOS-RA organizational structure to address how the data portal can be used to assist with building the E/O activities within GCOOS. The Workshop goals and objectives, intended results, and participants will be finalized in consultation with a small steering team set up to develop and plan this Workshop.

EOC Subcommittee Structure

EOC April 2006
Strategic Planning Subcommittee
Public Relations Subcommittee
Resources and Funding Subcommittee
Education Advisory Subcommittee
Ad Hoc E/O Coordinator Subcommittee – task completed

From EOC April 2006 Meeting Report:

Strategic Planning Subcommittee. The charge is to develop a Strategic Plan for the EOC. Chair: Lisa Spence. Members: Shelley DuPuy, Jessica Kastler, Diane Lindstedt, Rusty Low, Gary Lytton and Mike Spranger. Notes: Develop the GCOOS Education and Outreach Plan, which is a Strategic Plan that delineates the guiding principles and overall goals of the Council and includes in broad terms of reference to the environment in which the Council finds itself, including its terms of reference and relation to other GCOOS/IOOS bodies, key opportunities envisioned at this time, and major challenges. This document will guide the development of the detailed Implementation Plan, similar to the EOC Work Plan for May 2006 through April 2007.

Public Relations Subcommittee. The charge is to create visibility for EOC through mass media, displays, and other educational materials. Chair: Rob Smith. Members: Debbi Berger, Pamela Terasaki, and Lee Yokel. Develop press releases and other related public relations outreach materials. The first task is to prepare a draft press release on the EOC meeting which was accomplished.

Resources and Funding Subcommittee. The charge is to explore funding possibilities and secure resources for EOC activities. Chair: Mike Spranger. Members: Pam Blanchard, Gary Lytton, Charlene Mauro, and Sharon Walker. Identify types of resources and funding that are available; identify funding/resource opportunities and disseminate information; prepare proposals as appropriate; leverage resources through collaborations with other entities.

Education Advisory Subcommittee. The charge is to review OOS educational curricula and materials that may be appropriate for the Gulf of Mexico region. Chair: Pam Blanchard. Members: Debbi Berger, Diane Lindstedt, Charlene Mauro, Margaret Sedlecky, Chris Verlinde, and Lee Yokel. Possible tasks: inventory educational/curricular materials and resources for possible use in the GCOOS E/O activities (e.g., CoOL Classroom at Rutgers); identify pilot E/O activities for GCOOS; develop (or oversee the development of) selected E/O materials identified as needed for the GCOOS E/O effort. As a first step, the E/O Coordinator might compile a listing of available resources/materials that the Committee would then review for completeness and relevancy.

Ad Hoc E/O Coordinator Subcommittee. The charge is to develop a position description for the GCOOS E/O Coordinator and help in recruitment, selection and hiring of the individual. Chair: Sharon Walker. Members: John Dindo, Mike Spranger, and Joe Swaykos. This goal was accomplished with the hiring of a GCOOS E/O Coordinator on April 16, 2007.

Each EOC Subcommittee will determine if there is a more suitable name and, if a change is deemed appropriate, will make a recommendation to the EOC Chair. Each EOC Subcommittee will fine-tune its responsibilities and provide these refinements to the full EOC for comment. With the exception of Ad Hoc Subcommittee, the E/O Coordinator will work with each EOC Subcommittee to help facilitate the work of the entire EOC.